

Columbia/Snake River TMDL Issues
June 20, 2001 Draft - Not for Distribution

The following table lists technical/policy/legal issues that have been expressed during our TMDL committee meetings. Also listed are discussion points about each issue leading to a straw-person way to address the issue. The discussion points are rather cryptic and will be flushed out in detail at the June meeting. The discussion points have not been fully vetted through EPA and are simply a straw-person first try, not an EPA position. At the June meeting, the technical discussion on the RBM-10 model will precede the specific discussions of these issues but we may find these issues coming up in the model discussion.

Issue	Discussion Points
<ol style="list-style-type: none"> 1. Model outputs versus WQS 2. Spatial variation in temperature 3. Target or compliance points <p><i>(AKA How will the WQS be applied?)</i></p>	<ul style="list-style-type: none"> · Model output is daily or hourly cross sectional average temp. · WQS require daily max - don't specify where in the river but imply anywhere. · Temperature at a longitudinal point in the river can vary with width and depth. Warm places may exist even though the bulk of the flow is within standards. · Idea - (a) use max hourly ave as an approximation of daily max (most data is 1 sample per hour or 1 sample per day); (b) use cross-sectional average temp as the measure of river water temp. · So we express the numerical target as the hourly cross sectional ave temperature. · Compliance points: (a) at each heat source for establishing loads; (b) at tail race TDG stations at each dam for monitoring temperature versus WQS.
<ol style="list-style-type: none"> 4. Reconciling differences in WQS 	<ul style="list-style-type: none"> · Use the more stringent WQS. · Determine more stringent by the number of violations of each.
<ol style="list-style-type: none"> 5. Setting numerical targets 	<ul style="list-style-type: none"> · Simulate temperature (natural) without the dams; · Characterize natural temp versus time at each compliance point. · Capture the long term difference between natural and existing temperatures as the numerical target.

<p>6. WLA for point sources</p>	<ul style="list-style-type: none"> · Use model to estimate impact of each point source on the maximum hourly cross sectional area. · If it raises the maximum hourly cross sectional temp by less than state criteria, then give existing load. · If it exceeds state criteria, adjust load. · The permit process will need to address the plume.
<p>7. LA for tributaries</p>	<ul style="list-style-type: none"> · Use existing LA if a TMDL has been developed. · Use the numerical criteria (or threshold value) to develop the LA unless water temperature at critical conditions exceeds the numerical criteria. · If temperature at critical conditions exceeds the numerical criteria, use the existing temperature to develop an initial LA. · The LA developed using any of these three methods may be adjusted downward if it is a significant contributor to non-attainment of WQS on the main stem.